

DESCRIPTION

The Fail-Safe FMS Series combines maximum security construction features with energy saving technology. This surface mounted luminaire utilizes a one piece housing, security lensing and tamper resistant fasteners to maximize impact resistance and prevent unauthorized fixture penetration. An emergency battery pack is available as an option. U.L. listed and C.S.A. certified for wet locations.

The FMS Series is ideal for confinement/security applications. Suitable for use in inmate cells, psychiatric wards, secure corridors and general population areas.

SPECIFICATION FEATURES

A ... Lens

Choice of prismatic acrylic, prismatic polycarbonate or prismatic tempered glass on fixture side, clear polycarbonate or clear tempered glass on environmental side.

B ... Fasteners

Stainless steel tamper-resistant TORX® screws are standard. Allen-head screws with center reject pin are optional.

C ... Housing

Die-formed 12 ga.-18 ga. CRS body with continuous welded and ground ends to form a one-piece, seamless housing for maximum impact

C ... Housing Cont.

resistance and prevention of unauthorized fixture penetration. Standard white high reflectance polyester powder coat finish. Gloss: 85%; Reflectance: 93%; Hardness: 2H; Salt Spray: 500 Hours.

D ... Lamps

(By Others)

E ... Lens Retention

Lens secured by thru-studs and vertically adjustable internal CRS hold-downs.

F ... Hinge

Continuous, concealed piano hinge (1/4" diameter knuckle) with welded pin end to prevent removal.

G ... Door

One-piece, CRS door frame with die-formed edges and tightly closed corners increases rigidity (gauge to match housing).

H ... Ballast

Standard, Class P, CBM/ETL ballast.

I ... Labels

U.L. listed, C.S.A. certified, standard wet label.

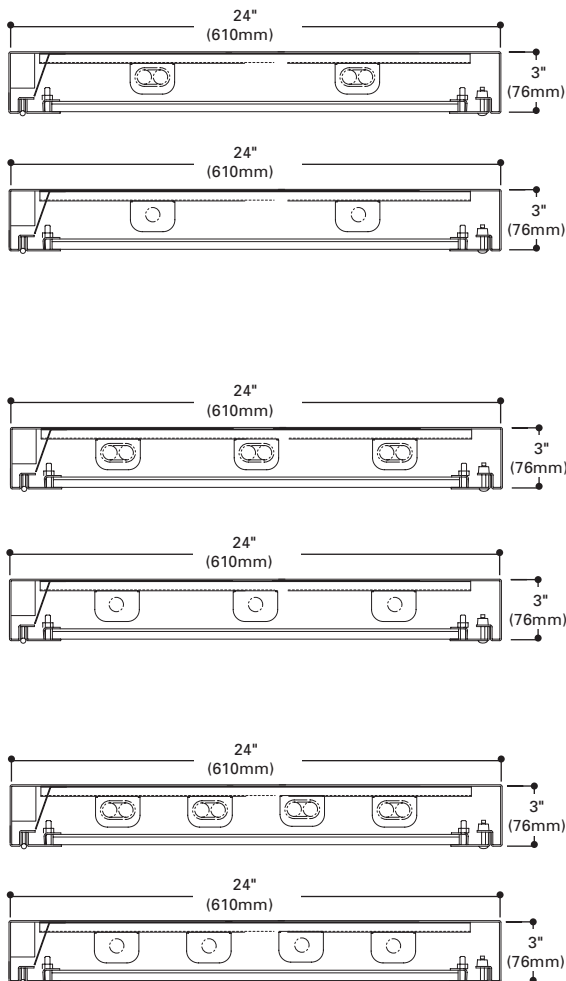


FMS24LP

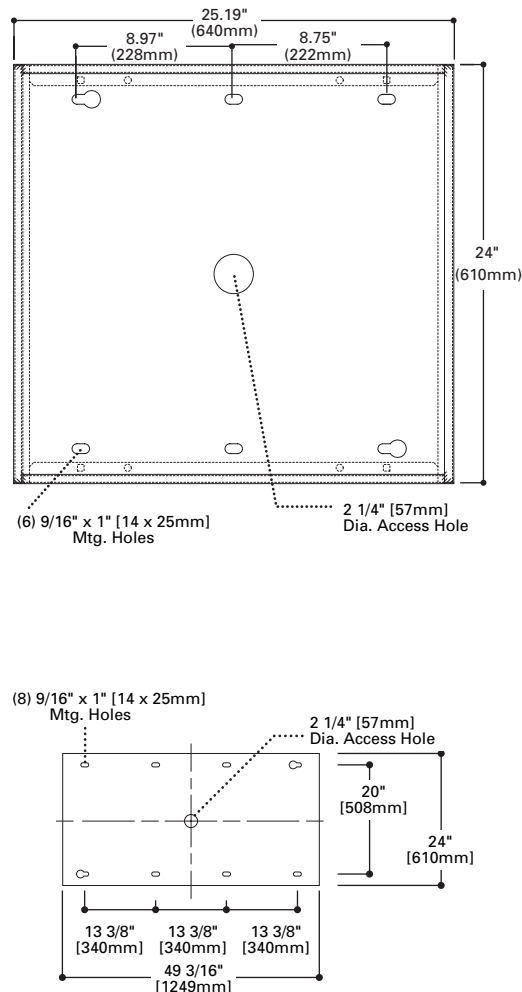
28W - 216W
Fluorescent

MAXIMUM SECURITY
LOW PROFILE
SURFACE LUMINAIRE
T5 LAMP TECHNOLOGY
T8 LAMP TECHNOLOGY

LAMP CONFIGURATIONS



MOUNTING DIMENSIONS



TORX® is a registered trademark of Camcar Division of Tectron Inc.

ENERGY DATA

Input Watts:

Electronic Ballasts & STD Lamps
(2) 40W Bi axial Fluorescents: 68W
(3) 40W Bi axial Fluorescents: 101W

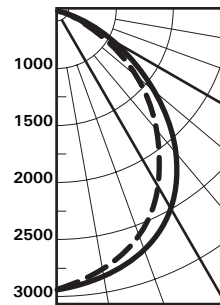
Electronic Ballasts & STD Lamps
(2) 17W T8 Fluorescents: 34W
(3) 17W T8 Fluorescents: 47W
(4) 17W T8 Fluorescents: 61W
(2) 32W T8 Fluorescents: 58W
(3) 32W T8 Fluorescents: 85W
(4) 32W T8 Fluorescents: 112W

Electronic Ballasts & STD Lamps
(2) 14W T5 Fluorescents: 35W
(3) 14W T5 Fluorescents: 55W
(4) 14W T5 Fluorescents: 70W
(2) 28W T5 Fluorescents: 63W
(3) 28W T5 Fluorescents: 97W
(4) 28W T5 Fluorescents: 126W

For High Output Electronic Ballast Data
Consult Cooper Lighting Representative

PHOTOMETRICS

Candlepower Distribution



Test No. 168P134
FMS24LP-432-120
 Lamp=(4) F032/35K
 Lumens=2800

Spacing Criteria
 $\angle=1.3$ $\angle=1.2$
 Efficiency=66.5%



Candlepower

Deg.	$\angle$	$\angle$
0	2962	2962
5	2943	2966
15	2846	2938
25	2638	2823
35	2278	2561
45	1744	2161
55	1127	1429
65	613	685
75	271	303
85	40	42
90	0	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-30	2362	21.1	31.7
0-40	3882	34.7	52.1
0-60	6499	58.0	87.2
0-90	7450	66.5	100.0
90-180	0	0.0	0.0
0-180	7450	66.5	100.0

Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	79	79	79	79	77	77	77	77	74	74	74	71	71	71	68	68	68	67			
1	74	71	69	67	72	70	68	66	67	65	64	64	63	62	62	61	60	59			
2	68	64	60	57	67	62	59	56	60	57	55	58	56	53	56	54	52	51			
3	63	57	52	49	61	56	52	48	54	50	47	52	49	47	51	48	46	45			
4	58	51	46	42	57	50	45	42	49	45	41	47	44	41	46	43	40	39			
5	53	46	40	36	52	45	40	36	44	39	36	42	38	35	41	38	35	34			
6	49	41	36	32	48	40	35	31	39	35	31	38	34	31	37	34	31	29			
7	45	37	32	28	44	36	31	28	35	31	27	35	30	27	34	30	27	26			
8	42	33	28	24	41	33	28	24	32	27	24	31	27	24	30	26	24	22			
9	39	30	24	21	38	29	24	21	29	24	21	28	24	21	27	23	20	19			
10	36	27	22	18	35	27	22	18	26	21	18	25	21	18	25	21	18	17			

rc = Ceiling reflectance, rw = Wall reflectance, RCR = Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

ORDERING INFORMATION

SAMPLE NUMBER: FMSLP-X24-232-277-80/86-EB81

Product Family	Housing	Fixture Width	Lamp Type	Voltage	Lens Type	Ballast	Options
FMSLP		24			/		
FMSLP	S=12 ga. (Ultimax) X=14 ga. (Maximum) D=16 ga. (Medium) N=18 ga. (Minimum)	24=24"	2' Nom. Length T5 Fluorescents 214=(2) 14W Lamps 314=(3) 14W Lamps ² 414=(4) 14W Lamps 224=(2) 24W HO Lamps 324=(3) 24W HO Lamps ² 424=(4) 24W HO Lamps T8 Fluorescents 217=(2) 17W Lamps 317=(3) 17W Lamps ² 417=(4) 17W Lamps Biaxial Fluorescents 240BX=(2) 40W Lamps 340BX=(3) 40W Lamps U Lamps 2U6T8=32W Lamp 2U15/8=31W Lamp 3U15/8=31W Lamp	120=120V 277=277V 347=347V Inner Layer 90=.005 UV Absorbing Overlay Fixture Side 80=.125 Prismatic Acrylic 81=.156 Prismatic Polycarbonate 82=.187 Prismatic Polycarbonate 93=.156 Prismatic Tempered Glass	Environmental Side 84=.125 Clear Polycarbonate 85=.187 Clear Polycarbonate 86=.250 Clear Polycarbonate 87=.375 Clear Polycarbonate 88=.500 Clear Polycarbonate 94=.187 Clear Tempered Glass 96=.250 Clear Tempered Glass 97=.375 Clear Tempered Glass 98=.500 Clear Tempered Glass	Blank =Magnetic Ballast (Standard) ³ LEOC8 =Energy Saving Ballast for use with T8 Lamp Electronic Ballast¹ EB81 =(1) Ballast for use with T8 lamp EB82 =(2) Ballasts for use with T8 lamps EBX1 =(1) Ballast for use with Biaxial Lamp EBX2 =(2) Ballasts for use with Biaxial Lamps EB51 =(1) Ballast for use with T5 lamp EB52 =(2) Ballasts for use with T5 lamps EBT1 =(1) Ballast for use with Compact Fluorescent Lamp EBT2 =(2) Ballasts for use with Compact Fluorescent Lamps	EBP =Emergency Battery Pack FNL =Fluorescent Night Light (Lamp by others.) LNL =LED Night Light (50,000 hrs.) provided by Cooper GLR =Fuse and Holder RIF =Radio Interference Filter Auto Control Modules ACM/FNL =for FNL On/Off Switches SPS =Security Push Button TCS =Touch Control System ^{2, 4} Stainless Steel Door SSN =Natural Brushed Finish SSP =Polyester Powder Coat Finish Fasteners SF3 =Allen-Head (center pin reject)

Notes:

For additional options consult Cooper Lighting Representative.

Specifications and Dimensions subject to change without notice.

Electronic ballast may cause interference with other electronic devices. If interference occurs, move the device away from the product or plug/connect into a different circuit/outlet.

¹ For specific electronic ballast, specify brand and catalog number.

² Requires Deep Housing=5".

³ For use with Compact Fluorescent, Biaxial, and 20W T12 lamps.

⁴ For additional information about the TCS option see Fail-Safe spec sheet for TCS Touch Control System (ADC030025) or pages 1106 and 1107 in the 4th Edition of the Cooper Lighting Buyer's Guide.

Accessories (order separately)

9306=Allen-Head Wrench
 VRSD=TORX®-Head Vandal Resistant Screwdriver